

Third Party Evaluation Report 2016
Ministry of Foreign Affairs of Japan

Evaluation of Grant Aid for Promotion of Japanese Standards

February 2017

Mizuho Information & Research Institute, Inc.

Preface

This report, under the title *Evaluation of Grant Aid for Promotion of Japanese Standards* was undertaken by Mizuho Information & Research Institute, Inc. entrusted by the Ministry of Foreign Affairs of Japan (MOFA) in fiscal year 2016.

Since its commencement in 1954, Japan's Official Development Assistance (ODA) has contributed to the development of partner countries, and has contributed to bringing solutions for international issues which vary over time. Recently, in both Japan and the international community, implementing ODA requires higher effectiveness and efficiency. MOFA has been conducting ODA evaluations every year, of which most are conducted at the policy level with two main objectives: to improve the management of ODA; and to ensure its accountability. The evaluations are conducted by third parties, to enhance transparency and objectivity.

This evaluation study was conducted with the objective of a comprehensive evaluation, based on aid trends in partner countries and in the international community and the activities of related organizations in assistance area, on aid executed by Japan as Grant Aid for Promotion of Japanese Standards. This evaluation was carried out both from a development perspective and diplomatic perspective, including the impact of Japanese contributions on the international community and in the field. It is intended to derive lessons and recommendations for purposes of future aid policy-making and execution.

Hiroshi Sato, chief senior researcher for the Inter-disciplinary Studies Center of the Institute of Developing Economies, served as a chief evaluator to supervise the entire evaluation process, and Takuji Date, professor at the Department of Healthcare Management of the College of Healthcare Management, served as an advisor to share his expertise on medical equipment,. They have made enormous contributions from the beginning of the study to the completion of this report. In addition, in the course of this study both in Japan and in Jordan and Sri Lanka, we have benefited from the cooperation of MOFA, the Japan International Cooperation Agency (JICA) and the local ODA Task Force, as well as government agencies in I Jordan and Sri Lanka, and private companies. The evaluation team would like to take this opportunity to express our sincere gratitude to all those who were involved in this study.

Finally, the Evaluation Team wishes to note that the opinions expressed in this report do not necessarily reflect the views or positions of the Government of Japan.

February 2017

Mizuho Information & Research Institute, Inc.

Note: This English version of the Evaluation Report is a summary of the Japanese Evaluation Report of "*Evaluation of Grant Aid for Promotion of Japanese Standards*"

Evaluation of the Grant Aid for Promotion of Japanese Standards

<Overview>

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Evaluation period: August 2016 to February 2017

Field study countries: Jordan, Sri Lanka

[Photo, upper right: CT scanner supplied to hospital in Sri Lanka
Photo, lower right: Hybrid vehicle supplied to the Jordan Ministry
of Environment]



Background, Objectives, and Targets of Evaluation

Since FY 2012, Japan had conducted the Grant Aid for Promotion of Japanese Standards (GAPJS), which provides made-in-Japan equipment and products to emerging and developing countries, not only for assisting the economic and social development of developing partners but also for supporting Japanese companies' overseas expansion through enhanced awareness of and sustained demands for such equipment and products. In this evaluation, a comprehension evaluation of the activities and initiatives based on GAPJS was conducted.

Summary of Evaluation Results (General)

● Development Perspective

(1) Relevance of Policies

Though inconsistent with the international trend of aid untying, GAPJS is generally consistent with Japan's higher ODA and economic policies and recipient countries' development policies, while its fields of providing equipment and products are in alignment with international and domestic priorities. From this, the overall evaluation of relevance of policies, while not reaching "Very High", can be designated as "High".

(2) Effectiveness of Results

The sound operational status of grant equipment and problem-free maintenance system earn positive marks. In terms of contributing to partner countries, equipment grants were in fields consistent with priority policies, direct benefits from operating equipment existed, and benefits for policy implementation were observed. On the Japanese economic revitalization front, although there are some contributions to the sales of contracting companies, the issue remained that no effective action targeting market development or promotion of Japanese standards, which is conclusive goal of this scheme, was found. Based on this, the overall evaluation of effectiveness of results is "Moderate".

(3) Appropriateness of processes

Positive marks are earned from the fact found in the field studies that MOFA, supplier agencies, and partner country governments hold appropriate discussions. However, identifiable problems include that: (1) insufficient consideration were given to categorical designation of providing equipment and products in the scheme-founding phase and to effective coordination with other existing aid schemes; (2) medical equipment and disaster reduction equipment were included in the scheme without overseas deployment perspective on specific products and manufactures; and (3) lack of field-level predictability in budgeting for projects hinders effective project formulation. For these reasons, an evaluation of "Marginal" may be considered suitable for appropriateness of processes.

● Diplomatic Perspective

Because of such factors as grants being in a concrete form of Japanese products and the quick signing of E/Ns, our evaluation was able to identify such diplomatic benefits as the potential to bind execution of projects with such diplomatic activities as official exchanges. Also identified were such benefits as diversification of diplomatic tool.

As for impact on bilateral relations between countries, GAPJS was shown effective in enhancing familiarity with Japanese products at the government and beneficiary levels.

Recommendations

(1) Identification of Scheme and Project Objectives for the Purpose of Establishing a Feedback Mechanism

Input objectives should be given shape by organizing needs by territory, field, and so forth. Output and outcome objectives should be considered about identification and systematic implementation of effective and realistic monitoring.

(2) Improvement to Predictability of Project Formulation and Strengthening of Authority on Local Level

Through the advance undertaking of individual country studies premised on GAPJS execution and preparation of such items as lists of candidate projects, a framework should be created that enables selection of priority target countries, coordination aimed at formulation of projects in advance at the field level, and effective coordination with other initiatives.

(3) Selection of Priority Target Medical and Disaster reduction Equipment

With respect to the automobile field, in coordination with industrial groups, GAPJS specializes in a field having superiority in environmental aspects. However, this is not the case for medical and disaster reduction equipment. To effect improvement, it is necessary to designate equipment groups that can demonstrate Japan's advantages.

(4) Clarification of Positioning in Global Goals

GAPJS is intended for the strategic use of ODA to further the economic national interest of Japan and strongly favors Japanese industrial development in comparison to other schemes. The proper role of ODA, however, is to address international issues and to aim for the economic and social growth of developing countries, a point of concern because it opens GAPJS to criticism. To improve on this point, we propose redefining GAPJS as a scheme that contributes to solutions to international issues, including environmental, medical, and disaster issues, by exploiting Japan's experience and technologies.

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Section 1 Execution Policies of the Evaluation

1-1 Background and Purpose of Evaluation

Since FY 2012, Japan had conducted the Grant Aid for Promotion of Japanese Standards (hereinafter GAPJS), which provides made-in-Japan equipment and products to emerging and developing countries, not only for assisting the economic and social development of developing partners but also for supporting Japanese companies' overseas expansion through enhanced awareness of and sustained demands for such equipment and products. This has also been positioned as a specific measure of the Infrastructure System Export Strategy.

However, aid untying has been advocated in international discussions for aid effectiveness, and in the *OECD Development Co-operation Peer Reviews (Japan 2014)*, it was suggested that Japan should reverse its drop in untied percentage. Given that GAPJS projects are tied, their implementation should be based on the scheme sufficiently justifiable to the international community.

The audit result for GAPJS, which was published by the Ministry of Finance in June 2015, contained the criticism that GAPJS under the jurisdiction of the Ministry of International Affairs (MOFA) is behind in terms of the feedback mechanism (setting of key performance indicators, ex-post evaluation, etc.) and of the transparency, compared with other bilateral ODA by the Japan International Cooperation Agency (JICA). This evaluation will also be executed with a view towards the establishment of a feedback mechanism that takes into account such criticisms.

1-2 Targets and Period of Evaluation

The target of this evaluation is the projects of GAPJS that provided next-generation vehicles, medical equipment, and disaster reduction equipment in FY 2012-15.

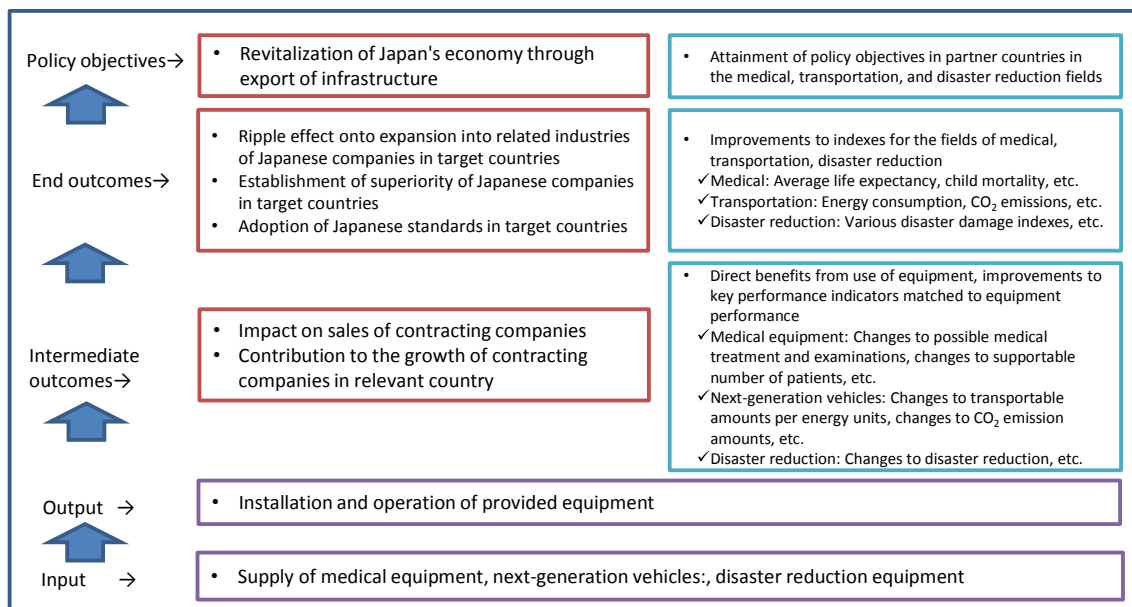
1-3 Framework of Evaluation

1-3-1 Creation of an Objective Framework

In the execution of this evaluation, an objective framework was created in order to clarify the objectives and positioning of GAPJS. This schematic is used in the verification of the extent to which GAPJS has achieved objectives and in identifying its structural issues.

GAPJS is considered as aiming to achieve two major objectives through the supply (input) of medical equipment, next-generation vehicles, and disaster reduction equipment. These are the revitalization of the Japanese economy through infrastructure export and the attainment of development policy objectives for partner countries. The objective framework is created as a means of indicating logical relationships between these inputs and major policy objectives. In creating this objective framework, the evaluation team developed a proposed framework while referring to various policy documents and completed it in discussions with officials from MOFA, JICA, and others who were involved in the actual work of GAPJS. (Table 1-1).

Table 1-1 Objective Framework



Source: Compiled by the Evaluation Team.

1-3-2 Evaluation Framework from Development Viewpoints

For this evaluation, an approach was adopted comprising comprehensive

examination from the three viewpoints of *relevance of policies*, *effectiveness of results*, and *appropriateness of processes* in compliance with MOFA's ODA Evaluation Guidelines (10th Edition). In addition to development viewpoints, evaluation was also carried out from the diplomatic viewpoints as mentioned later.

Relevance of policies was evaluated by verifying international assistance trends, Japan's higher policies, Japan's relative advantages, and the development needs and fields.

Effectiveness of results was examined in terms of whether or not the respective objectives of inputs, outputs, intermediate outcomes, and end outcomes were attained in accordance with the objectives schematic. However, with respect to the evaluation of objectives for end outcomes, the identification and evaluation of direct contributions by GAPJS is difficult. For this reason, examining coordination between schemes and with related measures by partner country governments, it was evaluated whether GAPJS made efforts to enhance probability of achieving end outcomes and brought about some effects possibly related to end outcomes. In addition, because local information was frequently necessary to examine effectiveness, verification of the effectiveness of results of output and above was done through evaluation focused on projects in Jordan and Sri Lanka where field studies were taken place.

As for *appropriateness of processes*, it was examined whether or not assistance projects were composed appropriately based on Japan's higher policy frameworks, such as Japan's ODA Charter and the Country Assistance Policies. Specifically, the preparation of scheme operation guidelines, assistance implementation structure of related organizations, implementation status of monitoring and follow-up, and other factors were examined through hearings with MOFA, Japan International Cooperation System (JICS) (the acting procurement agent), contracting companies, and others. Main evaluation items and their descriptions are shown in Table 1-2.

Table 1-2 Evaluation Frameworks

	Evaluation Items	Evaluation Description
Relevance of Policies	1. Consistency with international assistance trends	<ul style="list-style-type: none"> • Consistency of assistance trends and schemes of the Organization for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC), etc. • Consistency with development goals such as the Millennium Development Goals (MDGs), the Sustainable Development Goals (SDGs), etc. and other international priority topics and higher frameworks

	Evaluation Items	Evaluation Description
	2.Consistency with Japan's high-level policies	<ul style="list-style-type: none"> • Consistency with Japan's ODA Charter / Development Cooperation Charter • Consistency with Japan's economic policies (Infrastructure System Export Strategy, etc.) • Consistency with the Initiatives and relevant assistance policies
	3.Consistency with development needs of partner country	<ul style="list-style-type: none"> • Consistency with partner country's development plans • Consistency with partner country's development needs
Effectiveness of results	1.Input	<ul style="list-style-type: none"> • Equipment provision performance (value, quantity, target country) • Presence of quantitative target values for equipment provision and degree of their attainment
	2.Output	<ul style="list-style-type: none"> • Whether provided equipment has been installed • Whether provided equipment operate as expected and satisfy needs • Whether equipment has been used for other than initial objectives (personal use, etc.)? • Whether use of equipment has ceased due to breakdowns or lack of consumables (replacement parts, etc.)?
	3.Outcome as attainment of partner country's policy objectives	<p>Intermediate Outcomes</p> <ul style="list-style-type: none"> • Changes to medical treatment and examinations at hospitals and clinics that have installed medical equipment • Contribution to energy-saving, environmental measures, improvements to safety, etc. through introduction of next-generation vehicles, • Changes to disaster reduction through introduction of disaster reduction equipment <hr/> <p>End Outcomes</p> <ul style="list-style-type: none"> • Contribution to attainment of partner country's public health and medical policy objectives and related policy coordination • Contribution to attainment of partner country's transportation, energy-saving and environmental policy objectives and related policy coordination • Contribution to attainment of partner country's disaster reduction objectives and related policy coordination
	4.Outcome as revitalization of Japan's economy through infrastructure export	<p>Intermediate Outcomes</p> <ul style="list-style-type: none"> • Contribution to sales of contracting companies • Contribution to entry of contracting companies into partner country's market <hr/> <p>End Outcomes</p> <ul style="list-style-type: none"> • Ripple effect onto expansion into related industries of Japanese companies in target countries • Establishment of superiority of Japanese companies in target countries • Adoption of Japanese standards in target countries

	Evaluation Items	Evaluation Description
Appropriateness of Processes	1.Appropriateness of scheme creation process	<ul style="list-style-type: none"> • Whether appropriate discussions and coordination took place with related people during scheme foundation • Whether coordination to ensure consistency with related policies took place during scheme foundation
	2.Appropriateness of execution process	<ul style="list-style-type: none"> • Whether appropriate discussions and coordination between the partner government and beneficiaries took place • Whether appropriate discussions and coordination with JICA, private companies, and other such related organizations took place
	3.Appropriateness of evaluation and follow-up	<ul style="list-style-type: none"> • Whether operational guidelines and follow-up systems exist and are appropriately applied

Source: Compiled by the Evaluation Team.

1-3-3 Evaluation from Diplomatic Viewpoints

Evaluation from a diplomatic perspective was conducted by examining the diplomatic importance and ripple effects of GAPJS. A qualitative evaluation of this subject was conducted based mainly on information from hearings. Since Japanese economic revitalization was evaluated as one effect in *effectiveness of results* for GAPJS, the evaluation conducted in this section was focused more on strengthening of diplomatic relations rather than on economic benefits to Japan.

The main evaluation items and their descriptions are shown in Table 1-3.

Table 1-3 Framework of Evaluation from Diplomatic Perspective

Evaluation Items	Evaluation Description
1. Diplomatic importance	<ul style="list-style-type: none"> • To what degree GAPJS have diplomatic importance
2. Diplomatic ripple effects	<ul style="list-style-type: none"> • Whether GAPJS brought about an impact on strengthening of relations with partner countries at the government level • Whether GAPJS brought about enhancement to familiarity with Japan achieved through the promotion of Japanese products at the field level

Source: Compiled by the Evaluation Team.

1-4 Evaluation Procedure

1-4-1 Determination of Evaluation Design

Under the direction of the chief evaluator, the evaluation team held discussions with related departments of MOFA and JICA and others at the first review meeting, verified evaluation objectives, targets, methods, work schedule, and other parts of the evaluation design, and formulated an implementation plan.

1-4-2 Domestic Study (Literature Search, Hearing Examination)

In accordance with the evaluation targets and framework examined as mentioned above, a search of the literature was performed based on materials related to GAPJS (policy papers, project reports, basic statistics, treatises, documents by related parties, etc.) and information was gathered and organized regarding the objectives, performance and results of activities, implementation process, and other matters of GAPJS.

Additionally, hearing examinations with related domestic organizations and experts were conducted regarding audit items derived from the evaluation framework.

1-4-3 Field Studies

Based on a literature search and domestic hearing examinations, field studies were conducted in the case study countries of Jordan and Sri Lanka. The field studies, conducted from September 25 to October 4, 2016, comprised hearing examinations with Japanese government organizations, partner country government organizations, beneficiaries, private companies, etc. and on-site survey in order to examine the comprehensive effectiveness that GAPJS had brought about in the case study countries, the involvement of local related organizations in the assistance process, and other related factors.

1-4-4 Preparation of Report

Analysis and verification were conducted in accordance with an evaluation framework based on information collected from the domestic and field studies and assembled into a report draft. After that, the opinions of MOFA, related departments of the JICA, and others were solicited in a study group, and based on these opinions the report was finalized.

Section 2 Overview of GAPJS

2-1 What is GAPJS?

2-1-1 Definition and Objectives

Grant Aid for Promotion of Japanese Standards (GAPJS)¹ is a specific group of the ODA projects carried out by the Government of Japan “aiming at both the development of developing countries and the revitalization of Japanese economy” through providing and diffusing “superior products” made in Japan to “emerging and developing countries with prospects for future market expansion”.² From the end of FY 2012, projects for providing medical equipment and next-generation vehicles were formulated, to which the disaster reduction equipment project was added in FY 2014.

GAPJS was launched within the framework of non-project grant aid. Although grant aid and non-project grant aid (a sub-scheme of grant aid) were formally defined by law (Japan International Cooperation Agency Act, etc.) and in white papers, GAPJS has not been given similarly formal definition. As for documents in MOFA, there exist only overview papers for each field of product to be provided: “Non-project Grant Aid of Medical Equipment”, “Non-project Grant Aid of Next-generation Vehicles”, and “Non-project Grant Aid of Disaster Reduction Equipment”. In this sense, rather than a formal scheme or sub-scheme, GAPJS can be regarded as a group of projects having common objectives referred somewhat informally and objectively verifiable common specifications.

However, even informal references to its objectives do not actually state explicitly *promotion of Japanese standards*. “Use of ODA to Contribute to Infrastructure System Export Strategy”, the MOFA document quoted at the beginning of this section, mentions the aim of promoting Japanese “products” but also does not touch upon “promotion of Japanese standards”. As mentioned above, even the titles of the three types of overview papers for each product field do not contain the phrase “Promotion of Japanese Standards” and, as shown below, none of the sentences concerning objectives use the term “Japanese Standards”.

- ... aiming at supporting overseas expansion of Japanese companies by

¹ The original Japanese name is *Musho Shikin Kyoryoku: “Nihon Hoshiki” no Fukyu*. No formal English title has been applied.

² Quoted expressions related to execution objectives are taken from: Ministry of Foreign Affairs, *Use of ODA to Contribute to Infrastructure System Export Strategy*, June 2015, page 7.

providing Japanese superior medical equipment and stimulating constant demands for made-in-Japan medical equipment, as well as at improving medical situation of partner countries.

- ... aiming at supporting overseas expansion of Japanese companies by providing Japanese next-generation vehicle and its maintenance equipment and stimulating constant demands for Japanese next-generation vehicle system in both vehicular and maintenance infrastructure, as well as at contributing to environmental pollution prevention and greenhouse gas emissions reduction in partner countries through promoting next-generation vehicle with low environmental load (particularly for public relations effects).
- Through provision to developing countries vulnerable to natural disasters of disaster reduction equipment and products made in regions that include Great East Japan Earthquake disaster areas, it aims at heightening visibility of and generating constant demands for those equipment and products, and contributing to the revitalization of regional economies and the reconstruction in disaster areas, as well as at assisting socio-economic development of partner countries.

Even the English tender documents for GAPJS procurement do not actually contain any expressions corresponding to "standards" in the project title, as shown below.

- Japan's Non-Project Grant Aid for Introduction of Japanese Advanced Products and Its System (Medical Equipment and Welfare Apparatus Package)
- Japan's Non-Project Grant Aid for Provision of Japanese Next- Generation Vehicle
- Japan's Non-Project Grant Aid for Provision of Japanese Disaster Reduction Equipment

2-1-2 Specifications

The most basic specifications common to all GAPJS projects having the above-mentioned objectives are that the eligible source country or the country of origin for products is restricted to Japan and tenderers and manufacturers are restricted to Japanese nationals. In other words, GAPJS is "tied" assistance.

Specifically, regarding the country of origin for products, Japan is clearly stipulated as the eligible source country for products in the "Agreed Minutes on Procedural Details" attached to the official Exchange of Notes (E/N) between

recipient country governments and the Government of Japan as well as on the tender notice of the invitation for procurement issued by the agent. On the tender form, “Japan” is written in the “Country of Origin” column in the table specifying products to be delivered and quantities in the “Delivery Requirements” part.

Examples of specific equipment to be supplied in each of the fields of medical, vehicle, and disaster reduction that are described in the aforementioned overview papers are shown in Table 2-1 below.

Table 2-1 Examples of equipment supplied through GAPJS

Field	Specific Examples of Equipment to be Supplied
Medical equipment	<ul style="list-style-type: none"> • X-ray equipment • Ultrasound diagnostic equipment • Monitors for surgery • Computed tomography equipment (CT) • Autoclave • Electrocardiograph • Newborn monitor • Obstetric care unit • Medical spectrometer • Clinical chemistry examination microscope • Artificial respirator • Anesthetic equipment • Operating table <p style="text-align: right;">etc.</p>
Next-generation vehicles	<ul style="list-style-type: none"> • Hybrid vehicle (HV) • Plug-in hybrid vehicle (PHV) • Electric vehicle (EV) • Clean diesel car (CD) • Compressed natural gas car (CNG) • (Installation of) Charge station • Maintenance equipment and spare parts expected to be used in maintenance facilities, etc.
Disaster reduction equipment	<ul style="list-style-type: none"> • Construction machinery • Transportation vehicles • Portable power generators • Lighting equipment • Tents • Portable toilets • Instruments for environmental measurements • Pumps • Lifeboat

	<ul style="list-style-type: none"> • Water purifier • Portable water tanks • Batteries • Emergency medical equipment • Rotary snow blower • Command vehicle • Surveillance camera
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Source: Compiled by the Evaluation Team based on the MOFA documents.

2-1-3 History

The GAPJS provision history by year and field is shown in Table 2-2.

Table 2-2 Supply history by E/N year and field

Year	Field	Qty	Grant Amount (billion yen)
2012	Next-generation vehicle	2	0.80
	Medical equipment	3	1.75
	2012 total	5	2.55
2013	Next-generation vehicle	7	4.70
	Medical equipment	6	3.55
	2013 total	13	8.25
2014	Next-generation vehicle	2	1.00
	Medical equipment	4	2.20
	Disaster reduction equipment	2	0.80
	2014 total	8	4.00
2015	Next-generation vehicle	3	1.50
	Medical equipment	2	1.10
	Disaster reduction equipment	6	2.00
	2015 total	11	4.60

Source: Compiled by the Evaluation Team based on based on annual Japan's Official Development Assistance (ODA) white papers and other documents.

2-2 Background to Launch of GAPJS

The first GAPJS grants were set on March 13, 2013 (E/N date for medical equipment grant for the Philippines and next-generation vehicle grant for Morocco) based on the FY 2012 supplementary budget approved on February 26 following preparation at MOFA in January 2013 of the overview papers for the non-project grant aid of medical equipment and next-generation vehicles. This

was during the same period when the second Abe administration, launched December 26 of the previous year, began setting forth Japan Economic Revitalization policies.

Japan's Emergency Economic Measures for the Revitalization of Japanese Economy that passed through the cabinet on January 11, 2013, a half month after the start of the administration, cited as a specific policy of the Growth Strategy, the third of the "Three Arrows"³, the "review of Japanese Loan and its original coordination with technical assistance for contributing to the overseas expansion assistance for Japanese companies", thereby setting forth a direction for ODA activities for assisting in the overseas expansion of Japanese companies. Further Growth Strategy details were spelled out following this in the Japan Revitalization Strategy announced on June 14 in which it was stated that ODA would be actively utilized for the following objectives.

- Government and private-sector unite to acquire world infrastructure markets with projected growth
- Promote the international expansion of Japan's medical technologies and services
- Export of infrastructure, securing of resources
- Promote and acquire de facto standards based on Japan's specifications
- Overseas expansion assistance for small to medium size companies

As a part of this trend, the Ministerial Meeting on Strategy relating Infrastructure Export and Economic Cooperation, which conducts discussions of priority items relating to Japan's overseas economic cooperation and strives for their strategic and efficient implementation while also carrying out assistance for the overseas expansion of infrastructure systems by Japan's companies and for the acquisition of foreign rights and interests in energy and mineral resources, held its inaugural assembly on March 13 of the same year. The Infrastructure system Export Strategy settled on by this conference on May 17 expressed the following (italicized by the quoter) as *strategic deployment of economic cooperation*, clearly stating as its intent the encouragement through grant aid of an understanding of the technological advancement of Japan's products and the laying of groundwork for full-scale business expansion on Yen Loan or commerce base.

- After encouraging an understanding of the *Japan's technical capabilities and high quality service* through training and seminars instituted through

³ "Three Arrows" refers the three policies of "bold monetary easing, flexible fiscal policy, and growth strategy that promotes private investment". "Japan's Emergency Economic Measures for the Revitalization of Japanese Economy", January 11, 2013, page 1.

technical assistance and *grant aid activities*, Yen Loan activities and projects that secure a commerce base will lead to support by JBIC and NEXI.

- High quality technical aid and *facilities and equipment development obtained through grant aids*, carried out by bearing the expenses of partner country governments targeted as ODA graduate countries, will be prioritized, leading to full-scale business expansion.

Furthermore, the Ministerial Meeting on Strategy relating Infrastructure Export and Economic Cooperation set for discussion the very topic of using ODA for promotion of Japanese standards at its 5th meeting held on September 12, 2013. Its materials indicated in “Assistance Policies for the Promotion of Japanese Standards” the “enhancement of awareness of Japan's technology and systems through grants of Japanese Standards products by ODA” as one of its policies. However, the following six points were cited as main examples of Japanese Standards, and with the exceptions of charging systems relating to EVs and equipment used in medical services, none correspond to the target product fields of GAPJS.

- (1) Terrestrial digital broadcasting
- (2) Vehicle related (CHAdEMO quick charging devices, technical standards for safety and environmental performance)
- (3) Customs and port related information processing systems
- (4) Geothermal power generation systems
- (5) Urban railway systems
- (6) Medical systems (Japanese medical service that use such diagnostic equipment as endoscopes and CTs)

From this it can be inferred that the launch of GAPJS from 2013 was carried in alignment with the use of ODA in assisting the overseas expansion of Japanese companies as contained in the economic policies, especially the Growth Strategy, of the second Abe administration that was inaugurated at the end of 2012.

However, regarding “Utilization of ODA for Promotion of Japanese Standards” as discussed in the Ministerial Meeting on Strategy relating Infrastructure Export and Economic Cooperation that was set up as part of the Growth Strategy, there was nearly no match between the assumed examples of Japanese Standards and the product fields actually subject to provision by GAPJS (Although EVs were an exception, cases of EVs being provided as GAPJS next-generation vehicle grants were rare.). This suggests that, given its launch before the formulation of the Infrastructure system Export Strategy and the Japan Revitalization Strategy,

GAPJS was not set up based on these strategies. It is perhaps accurate to say that it was launched in the mood that settled in just after the inauguration of the second Abe administration, that of actively using ODA for Japan Economic Revitalization.

However, GAPJS, which in no way can be considered based on the Infrastructure Export Strategy, is, as quoted above, treated in June 2015 MOFA documents under the title of “Use of ODA to Contribute to Infrastructure System Export Strategy”. It is considered that such kind of contradiction make GAPJS’s positioning vague and this vagueness is a fundamental cause of its gaps between signboards and objectives, between general signboards and individual project signboards, and between Japanese signboards and English project names as depicted earlier.

Section 3 Evaluation Results Conclusions and Recommendations

3-1 Evaluation Results Conclusions

3-1-1 Evaluation Conclusions for Relevance of Policies

Relevance of policies was evaluated from the standpoints of (1) Consistency with international aid trends, (2) consistency with Japan's higher policies, and (3) consistency with the development policies of recipient countries.

With respect of aid untying, one of the international aid trends, GAPJS is not in contravention with the DAC Recommendation on Untying ODA, but is inconsistent with overall untying as advocated at the High-Level Forum on Aid Effectiveness and other international arenas. Although discussions on untying of ODA are not put out front as much as before, even as non-ODA development cooperation increases, traditional international community policies have not been retracted or changed. In addition, in the context of, for example a paradigm shift from aid effectiveness to development effectiveness, neither has Japan repeated its assertion of the effectiveness and necessity of tied aid. As shown in Table 3-1, Japan's ODA is small compared to the scale of its economy and its untied percentage is not high. On this account, the grounds for demanding tolerance in launching new tied aid that is inconsistent with international trends are weak at best.

On contrast, GAPJS as aid that provides medical equipment, next-generation vehicles, and disaster reduction equipment is consistent with the international trends of placing importance on the fields of public health and medical care and of climate change measures. However, there is a concern that explanation and promotion of this consistency while making connections to today's important concepts of the Universal Health Coverage (UHC) and climate change mitigation and adaptation have not always been satisfactorily carried out.

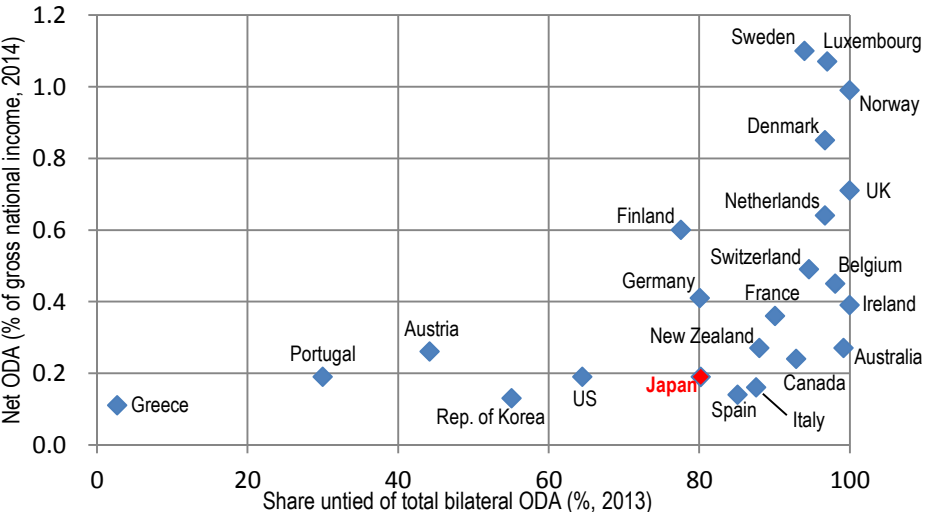
Regarding Japan's higher policies, GAPJS is viewed to have come directly from the economic policies of the second Abe Administration and is consistent with the Infrastructure System Export Strategy, Japan Revitalization Strategy, and other economic policies originated by this administration. However, some question remains about whether tied grants of advanced medical equipment and next-generation vehicles are of an institutional design that will lead to actual overseas expansion of Japanese companies and consequently to Japan's economic growth.

Additionally, GAPJS is basically consistent with Japan’s higher policies related to ODA, such as the ODA Charter / Development Cooperation Charter and the Guidelines for Support of Japanese Companies’ Overseas Activities. Its consistency is recently higher than before. However, even the newly-established Development Cooperation Charter is to principally respect the ownership and intentions of recipient countries and this fact is considered to put some reservations on GAPJS for its being tied.

Regarding consistency with the development policies of recipient countries, studies of Jordan and Sri Lanka - the case study countries for this evaluation - found that because GAPJS medical equipment and next-generation vehicle grants were appropriate for the public health and medical issues of both countries and for Jordan's energy and environmental issues, GAPJS was consistent with the development policies of both countries.

Considering the above points together, GAPJS, though not consistent with the international trend of aid untying, is generally consistent with Japan's higher policies, international and domestic priority issues such as healthcare and climate change measures, and the development policies of recipient countries. From this, relevance of policies falls short of an overall evaluation "Very High" and was judged to merit an overall evaluation of "High".

Table 3-1 Share untied and GNI ratio of selected DAC members’ ODA



Source: OECD-DAC, “Aid Untying: 2014 Report”, 26 September 2014; “Aid Untying: 2015 Progress Report”, 27 October 2015; and Ministry for Foreign Affairs, Japan (Original data taken from OECD-DAC).

3-1-2 Evaluation Conclusion for Effectiveness of Results

Regarding effectiveness of results, evaluation was conducted for the six items

of inputs, outputs, intermediate outcomes with respect to the policy goals achievement of the partner country, end outcomes with respect to the policy goals achievement of the partner country, intermediate outcomes with respect to revitalization of the Japanese economy, and end outcomes with respect to revitalization of the Japanese economy.

It is difficult to evaluate input because no input objectives had been indicated, and input of this scheme cannot be compared with other countries. With respect to the "P" of the PDCA cycle, the lack of input objectives should be considered an issue. Regarding outputs, although evaluation team found a few medical device problems, most provided equipment was being well used and high operating rates. Besides, there is another issue that installation of some equipment took one to two months from delivery, although responsibility for most of this is attributable to recipients.

Regarding intermediate outcomes with respect to the policy goals achievement of the partner country, this evaluation found the effectiveness of energy-saving and CO₂ emissions reduction arising from the use of next-generation vehicles (Table 3-2) and effectiveness in expanding medical treatment and number of treatable people arising from use of medical equipment. This effectiveness is result that granted equipment is used very well. Regarding end outcomes with respect to the policy goals achievement of the partner country, the large gap between the end outcomes and GAPJS execution made direct effectiveness difficult to examine. However, it was possible to verify GAPJS executed in align with the policy objectives of partner countries and the issues they face, allowing the conclusion that effectiveness did exist to a certain degree.

Table 3-2 CO₂ emissions reduction by hybrid vehicle

Assuming that the annual mileage of vehicles for official use is 10,000 kilometers and that their operation period is 10 years, and that fuel consumption of the introduced hybrid vehicles is 35.5 kilometers/liter and that of other official vehicles to be compared with is 19.4 kilometers/liter, the reduction in CO₂ emissions is as follows:

<Calculated estimate of CO₂ emissions over 10 years of 110 next-generation vehicles>

$$10,000(\text{km})/35.5(\text{km/l}) \times 10(\text{years}) \times 0.0334(\text{GJ/l}) \times 0.0686(\text{t-CO}_2/\text{GJ}) \times 110(\text{vehicles}) \\ =709(\text{t-CO}_2)$$

<Calculated estimate of CO₂ emissions over 10 years of 110 ordinary official use vehicles>

$$10,000(\text{km})/19.4(\text{km/l}) \times 10(\text{years}) \times 0.0334(\text{GJ/l}) \times 0.0686(\text{t-CO}_2/\text{GJ}) \times 110(\text{vehicles})$$

=1,299(t-CO₂)

<Calculated estimate of CO₂ emissions reduction achieved through introduction of next-generation vehicles>

1,299-709=590(t-CO₂)

Regarding intermediate outcomes with respect to revitalization of Japan's economy, this evaluation found that GAPJS was generally welcomed by the Japanese manufacturers supplying the equipment procured through GAPJS execution and that the scheme made a certain contribution to company sales. However, because the majority of equipment being supplied already had a history of supply in the country in which the equipment was to be introduced, it can be concluded that there was not a great effect on market development. As for end outcomes with respect to revitalization of Japan's economy, benefits to Japan from GAPJS were restricted to individual companies, allowing the criticism that GAPJS is not leading to the revitalization of the Japanese economy. Similarly to end outcomes with respect to the policy goals achievement of the partner country, despite the large gap between what was executed and end outcomes, no coordination with other efforts for the purpose of bridging the gap were observed, while medical equipment and disaster reduction equipment in accord with partner country demands are being provided without enough considerations of the markets and equipment that will expand going forward. Although it is important to keep in mind the context of respecting partner country ownership as part of ODA, efforts that apply the GAPJS feature of strategic use of ODA must be regarded as insufficient.

From these results, the overall evaluation of effectiveness of results is "Moderate".

3-1-3 Evaluation Conclusion for Appropriateness of Processes

Regarding appropriateness of processes, the four items of scheme foundation process, scheme implementation process, evaluation process, and coordination process with other schemes were evaluated.

Regarding the scheme foundation process, GAPJS was launched based on opinions and views from political and economic circles, putting it at variance to schemes created through ordinary ODA policies. Although that should not be denied from the standpoint of democracy, because its speedy launch was prioritized, considerations on designating fields and seeking out effective coordination with existing schemes were seen as insufficient.

In the designation of fields, although the three fields of next-generation vehicles,

medical equipment, and disaster reduction equipment can generally be assumed to retain Japan's characteristic advantages, GAPJS implementation procedures and ripple effects verification were viewed as insufficient in the fields of medical and disaster reduction equipment. Designation of next-generation vehicles was based on considerations of Japan's relative advantage and on prospects for overseas expansion based on discussions with the Ministry of Economy, Trade, and Industry, the Japan Automobile Manufacturers Association, and others. On the other hand, although discussions with concerned government offices were carried out also for medical and disaster reduction equipment, its provision were problematically launched based on few discussions of overseas expansion prospects on the basis of specific products and manufacturers.

Regarding appropriateness of scheme implementation process, the issue of no predictability in formulating projects exists because GPAJS is mostly funded by supplemental budgets decided later in the fiscal year. For this problem, it remains unclear whether and where current year's GAPJS projects would be made and whether grass-root proposal for a GAPJS project made after budget appropriation would be adopted. This hinders effective coordination with other schemes and a timely project launch from the mid- to long term standpoint of the partner country's development. In contrast, field studies found that in the coordination with partner country governments associated with concrete implementation of projects, appropriate discussions were held among MOFA, procurement agents, and the partner country government.

Finally, regarding appropriateness of evaluation and follow-up processes, GAPJS was subject to ad-hoc examination by local embassy officials. However, because no systematic evaluations were conducted, the near absence of information disclosure is an issue.

From this, an evaluation of "Marginal" is considered proper for appropriateness of processes.

3-1-4 Evaluation from Diplomatic Perspective

Although the scale of GAPJS grant amounts is small compared to other grant aid and ODA loan projects carried about by JICA, because of such factors as grants being in a concrete form of Japanese products and the quick signing of E/Ns, our evaluation was able to identify such diplomatic benefits as the potential to bind execution of projects with such diplomatic activities as official exchanges. Also identified were such benefits as diversification of diplomatic tools, such as the ability to provide grants to countries that have made gains in economic status that are not eligible for ordinary assistance schemes.

Regarding specific impact on bilateral relations, effectiveness was found in

such instances as the holding of a delivery ceremony for next-generation vehicles in Jordan—a case study country—attended by state ministers, and the enhancement of familiarity with Japanese products at government and beneficiary levels in Sri Lanka.

3-2 Recommendations

This section provides recommendations based on the evaluation by the evaluation team for making improvements to GAPJS schemes. In particular, recommendations are focused on outcomes with respect to revitalization of the Japanese economy and on scheme execution process and evaluation and follow-up processes, treated respectively in effectiveness of results and appropriateness of processes, and pointed out as issues in this evaluation.

■ Recommendation 1: Identification of Scheme and Project Objectives for the Purpose of Establishing a Feedback Mechanism

As pointed out under appropriateness of processes, GAPJS retains the issue of not having a systematic evaluation process, and was also criticized by the Ministry of Finance for not having established a feedback mechanism. This systematic evaluation process and execution of a feedback mechanism (the so-called “PDCA” cycle) that is based on such process are important, requiring formulation of a robust plan (P) and definition of monitoring indexes. In particular, with regard to the promotion of Japanese standards, a characteristic feature of GAPJS, because what to pursue by means of equipment grants execution methods has not been established, this is an area requiring improvement. As stated in the evaluation of inputs, efforts should be made to create specific plans for input objectives by organizing needs region-by-region and field-by-field. Additionally, it is necessary to clearly document and share with concerned parties—including partner country governments—what is being aimed for in terms of outputs and outcomes, that is GAPJS results.

Moreover, in addition to the direction that GAPJS should pursue as a whole, it is important to identify the aims of equipment grants in each project. The projects undertaken through GAPJS are the non-project type, and the type of equipment to be provided is decided after the project is set. With regard to what is necessary to monitor during this process, while including partner countries in discussions, it is necessary to establish and evaluate realistic methods for the minimum necessary examination of operational status following equipment delivery and of

ripple effects on the Japanese economy. For example, although JICA conducts ex post facto external evaluations on all projects over one billion yen and carries out ratings, GAPJS projects are mostly in the order of several 100 millions of yen, a scale at which third-party evaluation is not considered necessary. However, rather than current ad hoc evaluations, a systematic approach to evaluation should be taken, that is, one comprising the examination of operations immediately after equipment supply and after several years. Although field studies found that in current ad hoc follow-ups on-site examinations were carried about in accordance with evaluation items produced by the MOFA head office, neither the execution period was set nor was it clearly defined how to use the evaluation results. It is important to institute a framework for monitoring and follow-ups of GAPJS and to clarify that further implementation and new development of GAPJS projects will be based on the results of such monitoring and follow-ups. In addition, because it is also considered of fundamental necessity in medical equipment for not only Japan to carry out evaluation, but for the partner country to conduct monitoring and provide status reports in accordance with Japan's requests, it is hoped that considerations will be carried out that lead to the strengthening of the partner country's monitoring system. JICA essentially discloses evaluation results but currently does not disclose ad hoc evaluations by GAPJS. Because GAPJS accents support of Japanese companies, it should attract the strong interest of Japanese companies. It is therefore required basically to disclose its evaluation results.

Because the findings of ODA evaluations undertaken previously on an individual project basis have insufficiencies with respect to examination of ripple effects on the Japanese economy, deciding items for monitoring is a difficult task. However, possibilities include considering types of standards that aspire to standardization and normalization and monitoring changes to trends in contracting companies and companies whose entry can be expected in connection with this. Moreover, in the course of actual monitoring, it is necessary to demand a certain amount of accountability from contracting private-sector companies. As GAPJS is a scheme that contains factors for the overseas expansion of Japan's companies, it may be advisable to mandate the monitoring and reporting by companies of the changes they experience as a result of receiving assistance. More than a few domestic subsidy systems require ex post factor reporting and auditing by businesses receiving subsidies. It may merit consideration, for example, to mandate the monitoring by companies involved in GAPJS of how sales of procured equipment changed in relevant countries before and after project execution and to mandate the reporting of how project execution affected sales and as well as business expansion in relevant countries. In addition, following provision of equipment through GAPJS, procurement agents should

continue with efforts to carry out selection of medical equipment whose evaluation exceeds previous levels in pursuit of equipment marketable in the private-sector.

■ **Recommendation 2: Improvement to Predictability of Project Formulation and Strengthening of Authority on Local Level**

As a non-project type equipment grant, GAPJS by itself cannot achieve the promotion of Japanese standards that is the conclusive goal of GAPJS. To improve effectiveness in this regard requires a considerable grasp of the local situation, execution timing, and seeking out of coordination with such organizations as JICA and JETRO and with private-sector companies. Undermining this is the current low predictability of project execution, preventing considerations of coordination with other organizations. Specifically, as pointed out under appropriateness of processes, needs studies for each country are carried out simultaneously at the request of the MOFA Headquarters, and project adoption is considered and determined after those needs appear. It is not possible to ascertain effective time periods and projects and name project needs at the local level. Neither can it be known whether projects will be adopted or not.

In order to make inroads to solutions to these issues, we propose improvement to the predictability of project formulation and strengthening of authority at the local level. Specific action meriting consideration is as follows: In advance, study and organization of needs premised on GAPJS execution should be carried out on an individual country basis and candidate project listed created. On this basis, priority target regions and countries for each of the three fields of next-generation vehicle, medical equipment, and disaster reduction equipment should be selected. This will enable project formulation and coordination with other schemes at the local level in those countries in advance. This will raise the predictability of project execution at the local level, and provided that authority at the local level can be strengthened, bring closer the achievement of the major objective of GAPJS, the promotion of Japan standards.

■ **Recommendation 3: Selection of Priority Target Medical and Disaster reduction Equipment**

In the provision of next-generation vehicles, the field designation approach was not to designate vehicles in general, but rather to designate high environmental performance but somewhat pricey next-generation vehicles as strategic equipment for Japan's automobile industry that would drive its future overseas expansion. In contrast, medical and disaster reduction equipment include a wide range from large-size CT and MRI equipment costing over several tens of million yen for each device to smaller and relatively cheaper devices such as

electrocardiographs. Although the scale of equipment sizes and prices is not an issue, it may be necessary to consider the degree to which companies are actively pursuing the overseas expansion of this type of equipment and of what kind of ripple effects this has on Japan in general and, based on this, to designate equipment groups with a focus on demonstration of Japanese advantages. The World Health Organization (WHO) has created a list of medical equipment that takes into account the setting in which they will be used in developing countries⁴. Creating such a list for Japanese products should make it possible to reconcile with the requests of grant recipient countries by referring to the list.

The following four points are proposed as perspectives in designating specific equipment groups.

- (1) High performance but pricey advanced equipment that is difficult to evaluate at tender
- (2) Matters encompassing such factors as standards and standardization related to other Japanese industries
- (3) High quality products of small to medium size companies that have difficulty in developing sales channels on their own, though future overseas expansion is desired.
- (4) Potential for supporting global goals spelled out in Recommendation 4

Regarding (1), the driving of the introduction of high quality Japanese products that fare badly in the cost wars of international competitive bidding and the selection of products that will lead to stimulation of their sustained demand are consistent with the tied assistance policy that characterized GAPJS. However, even from this perspective, rather than taking Japanese products as not competitive, it is necessary give consideration to how to demonstrate their high quality. Regarding (2), in relation to infrastructure and the cutting edge technologies possessed by Japanese companies, as typified by differences in the charging systems for next-generation vehicles, that these technologies are in alignment with Japan's international standardization strategy is important as a perspective in equipment selection. For example, Intellectual Property Strategic Program 2010 formulated by the Intellectual Property Strategy Headquarters of the prime minister's official residence names advanced medical care as a designated strategic field and cites as an issue the development of innovative medical treatment equipment and diagnostic devices that exploit fundamental technologies representative of Japanese company strengths, such as electronic

⁴ World Health Organization, *Compendium of innovative health technologies for low-resource settings, 2011-2014*

equipment, and securing competitive advantage.⁵ In addition, Intellectual Property Strategic Program 2016 cited the promotion of standardization in technical fields related to information communication infrastructure premised on the creation of diverse services utilizing IoT (Internet of Things), big data, and artificial intelligence.⁶ In recent years, the linking of information communication technology with medical equipment has gained tremendously in importance. Whether or not equipment incorporates technologies related to such fundamental technologies as electronic equipment and information communication infrastructure is important as a perspective in selecting equipment for priority provision. Regarding (3), in light of the criticism stated in effectiveness of results, that the beneficial effects to Japan's economy of GAPJS are restricted to individual companies and most of the companies are large-scale companies, it is important to take a positive approach to selecting the high quality products of small to medium size companies whose need for assistance is considered relatively high. Regarding (4), as described in Recommendation 4, recent years have seen the working out of various new formulations of global goals. Consequently, having relevance to that as a perspective in selecting equipment should be considered important from the standpoint of the international accountability of Japan's ODA.

The necessity of overseas expansion for Japan's medical industry having been mentioned on frequent occasions in recent years, the time is ripening for such a move. However, due to high domestic demand arising from domestic medical expense expansion, overseas expansion is not given the same amount of importance as for the automobile industry. Because it is considered necessary to closely coordinate industry and relevant organizations⁷ concerned with medical and disaster reduction in order to designate equipment groups on the basis of the above four perspectives, it is necessary to designate equipment in the medical and disaster reduction fields for priority provision and select recommended equipment based on higher than ever before levels of coordination with industry and relevant organizations. Also meriting consideration is the seeking out of coordination with the medical equipment departments of the health ministries of both Japan and partner countries. Because our evaluation found that the departments in charge of the maintenance management of medical equipment in Jordan and Sri Lanka are functioning (Directorate of Biomedical Engineering in

⁵ Intellectual Property Strategy Headquarters Intellectual Property Strategic Program 2010
http://www.kantei.go.jp/jp/singi/titeki2/2010chizaisuisin_plan.pdf

⁶ Intellectual Property Strategy Headquarters Intellectual Property Strategic Program 2016
<http://www.kantei.go.jp/jp/singi/titeki2/kettei/chizaikaku20160509.pdf>

⁷ Examples for medical equipment include Japan Association of Medical Devices Industries, Japan Medical Imaging and Radiological Systems Industry Association, Medical Engineering Technology Industrial Strategy Consortium, Japan Society for the Promotion of Machine Industry, etc.

Jordan, Department of Biomedical Engineering in Sri Lanka), it may also be proposed to select recommendable made-in-Japan medical equipment in cooperation with such organizations.

■ Recommendation 4: Clarification of Positioning in Global Goals

As pointed out in Relevance of Policies, GAPJS is open to international criticism as a Japan-tied scheme. In view of the background leading to GAPJS establishment, it is indeed true that ODA is intended to be used strategically to further Japan's economic national interest, projects are to be executed as a mechanism for providing made-in-Japan equipment, and GAPJS strongly favors Japan's industrial development in comparison to other schemes. The proper role of ODA, however, can be seen as the addressing of international issues and the pursuit of economic and social growth of developing countries. It is on this point that concerns for criticism exist.

To improve this situation, we propose as an example the redefining of GAPJS as internationally-oriented contribution that exploits Japan's experience and technologies as stated in the development aid charter. We made an estimate in effectiveness of results of the reduction in CO₂ emissions achieved by means of next-generation vehicles. As shown in this example, it may be possible to demonstrate quantifiable international contributions, or it may be possible to position GAPJS as a way of contributing to specific provisions in global goals. At present, the global goals positioned as most comprehensive are the Sustainable Development Goals (SDGs) adopted by the United Nations in 2015. In keeping with its purpose, it cites environmental and transportation issues related to the next-generation vehicles, public health and medical issues related to the medical equipment, and issues related to the disaster reduction equipment, all equipment dealt with by GAPJS. Additionally, international objectives have been established for each field for each setting, and on the energy and environmental fronts, the Paris Agreement of the United Nations Framework Convention on Climate Change adopted in 2015 will come into force in 2016. In the medical field, there has been discussion of universal health care (UHC) that is backed heavily by Japan, and in the disaster reduction field, the Sendai Framework for Disaster Risk Reduction was agreed on in 2015. Importance should be recognized of considering how GAPJS can contribute to these global goals and positioning it as a scheme for contributing to solutions for such international issues utilizing Japan's technologies.

We would like to consider as an example the relationship between GAPJS medical equipment grants and UHC. UHC seeks to promote services related to appropriate and affordable health promotion, prevention, treatment, and functional recovery that is available to all people. UHC is also a matter of medical

care accessibility. Although the advanced medical equipment of Japan provided through GAPJS is not directly connected to improving on the issue of the poor who cannot receive even basic medical care, it may be able to potentially improve accessibility to advanced medical care and expand preventative care through medical examinations. Treatment of communicable diseases and noncommunicable lifestyle diseases has become important not only in advanced countries but also in some developing countries such as Jordan and Sri Lanka. This field represents an issue that the medical world of Japan has faced, and from the perspective of improving accessibility to medical technologies may be considered a field where it can exhibit a strong advantage. In this way, it should be possible to find a place for GAPJS medical equipment grants in UHC accessibility debate.

We would like also to consider issues of the Japan-tied GAPJS scheme with respect to contributing to the international objectives of Japanese companies. In recent years, Japanese companies such as Fujitsu, Ajinomoto, Sumitomo Chemical, and others have appeared who refer to contributions by their products and services to SDGs. The contributions of these companies are mostly in the form of intermediate products and services rather end products. Specifically, Fujitsu has touted contributions by its services in such instances as the contribution to sustained development made by providing ICT services⁸, while Ajinomoto is acting in the fields of food and nutrition and of agriculture where its amino acid technology is utilized.⁹ As part of its Sumika Sustainable Solutions initiative, Sumitomo Chemical manufactures materials comprising lightweight plastics reinforced with carbon fiber for airplanes and CO₂ separation membranes.¹⁰ Moreover, from the perspective of the promotion of Japanese standards, FeliCa, a "contactless" IC card technology developed by Sony aspiring to worldwide standardization, is installed in such devices as mobile phones and needs to be deployed coordination with infrastructure. When considering the current state of such overseas expansion and international contribution achieved through the technical capabilities of Japanese companies, what must be considered is the extent to which an execution policy that, like GAPJS, is connected to Japan's national interest through execution as a tied scheme restricted to end products made in Japan, serves in obtaining both international contribution and Japan's economic revitalization. Taken from a different point of

⁸ From *Fujitsu Group Environmental Action Plan*
<http://www.fujitsu.com/jp/about/environment/approach/plan/index.html>

⁹ From *Ajinomoto Group Sustainability Data Book 2016*.
http://www.ajinomoto.com/jp/activity/csr/pdf/2016/ajinomoto_csr16.pdf

¹⁰ From *Sumitomo Chemical New Releases*.
<https://www.sumitomo-chem.co.jp/newsreleases/docs/20161104.pdf>

view than that of GAPJS improvement, contribution to international issues by Japan's technology and through promotion of Japanese standards will likely become important perspectives of Japanese ODA overall. In this respect, rather than an awareness of Japan-tied as the promotion of Japanese standards or of Japan's national interest, a better approach might be to give consideration to a broader perspective that encompasses Japan's contributions and Japanese economic revitalization.

Table 4-1 Areas of Recommendation

Recommendation Level	Recommendation	Relevant Body		Timeframe
		HQ Level MOFA head Office	Local Level Local Embassy	
Aid modality, aid procedures level	1. Identification of Scheme and Project Objectives for the Purpose of Establishing PDCA Cycle	○		Short term
	2. Improvement to Predictability of Project Formulation and Strengthening of Authority on Local Level	○	○	Short to mid-term
Policy and strategic direction level	3. Selection of Priority Target Medical and Disaster reduction Equipment	○		Short term
	4. Clarification of Positioning in Global Goals	○	○	Short to mid-term